

Maine Workforce Dynamics: Challenges and Opportunities for Education and Training Institutions

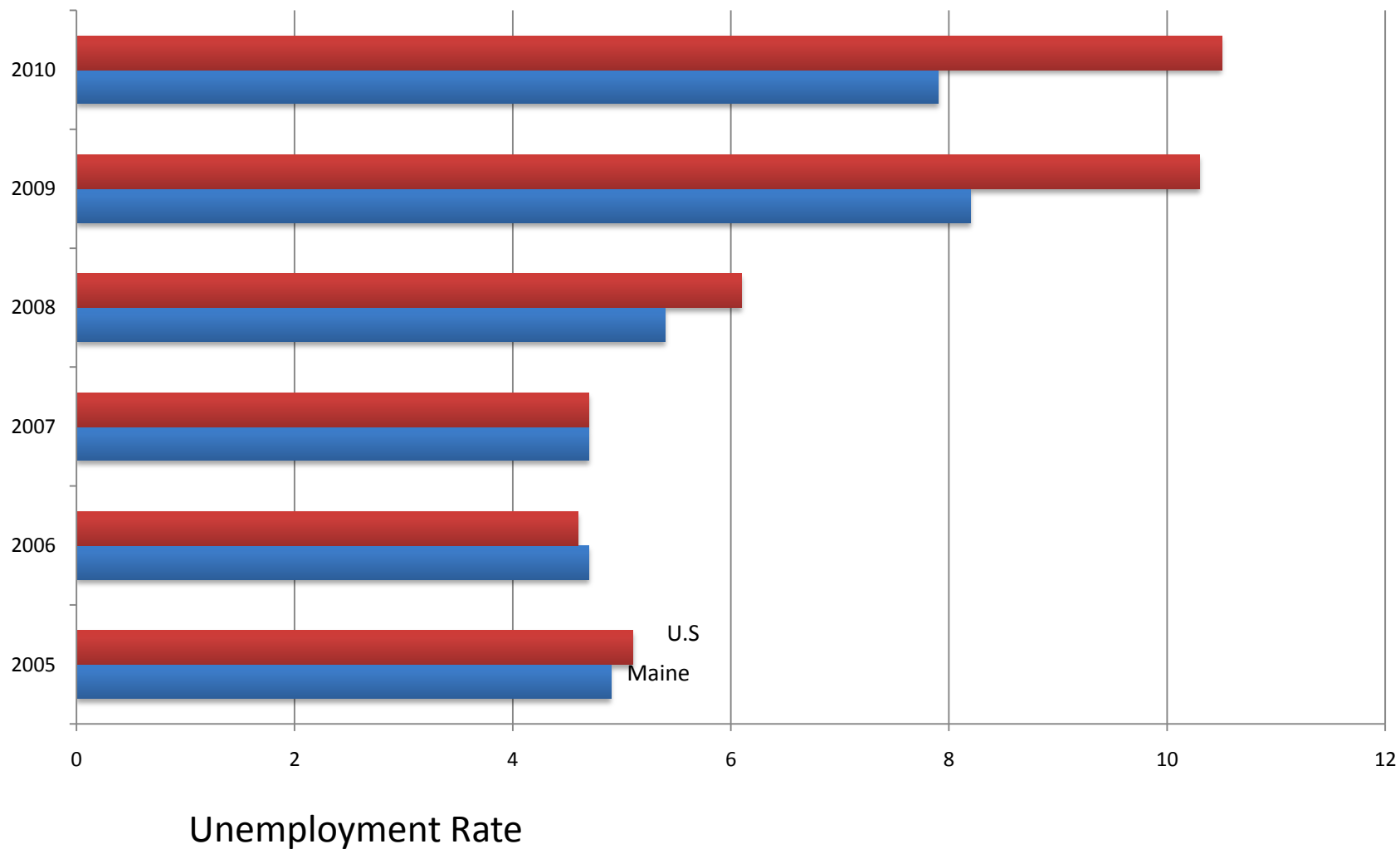
A presentation for the
Maine Futures Institute

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Jobs for the Future
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and Director of the Center for Workforce Research and
Information, Maine Department of Labor

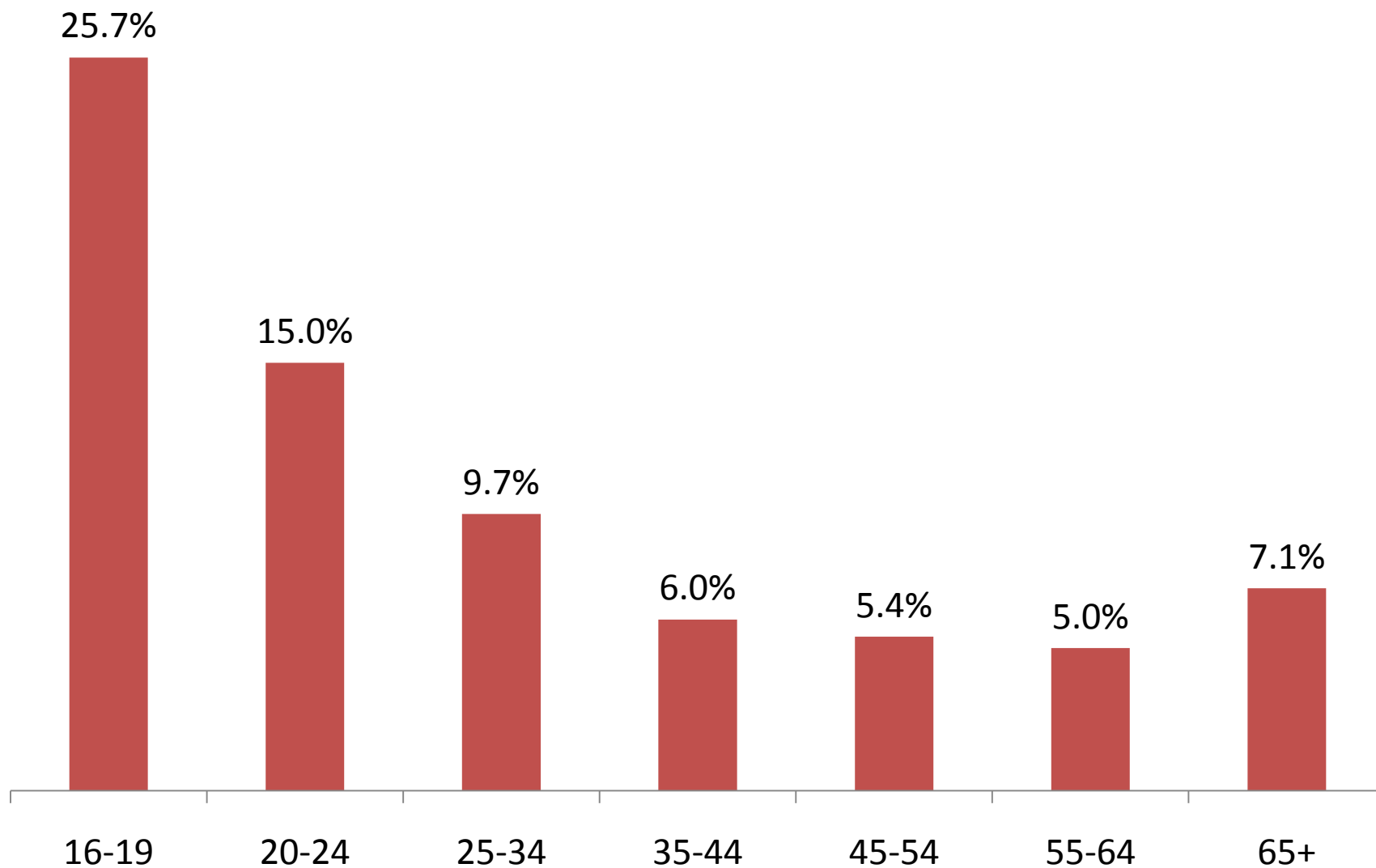
Overview

- From Recession to Recovery 2007-2011
- Maine's Demographic Challenges and Implications for the Workforce
- Opportunities, Occupation and Skills Projections 2008-2018

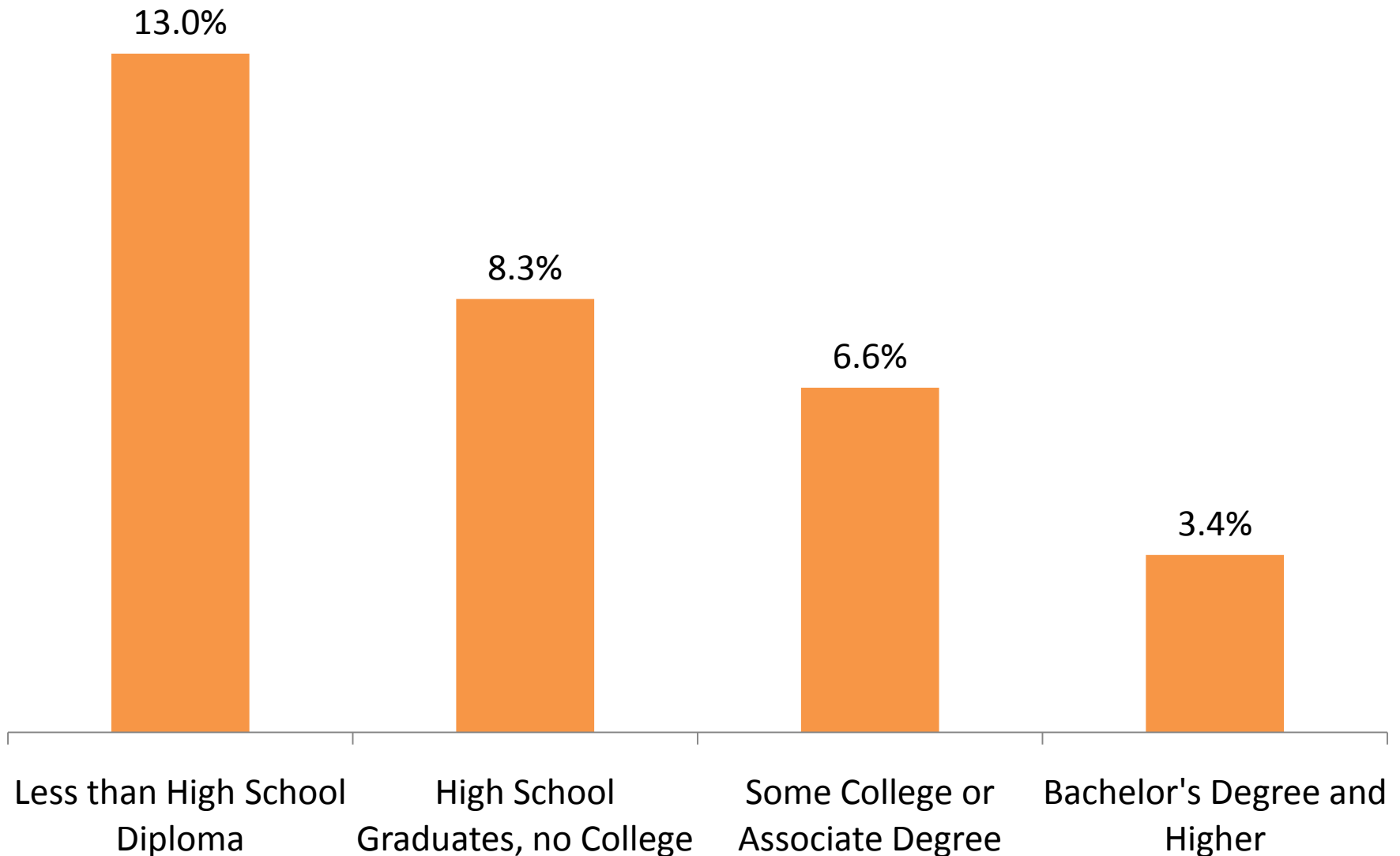
Unemployment Rate, Maine and U.S. Feb 2010 -2011



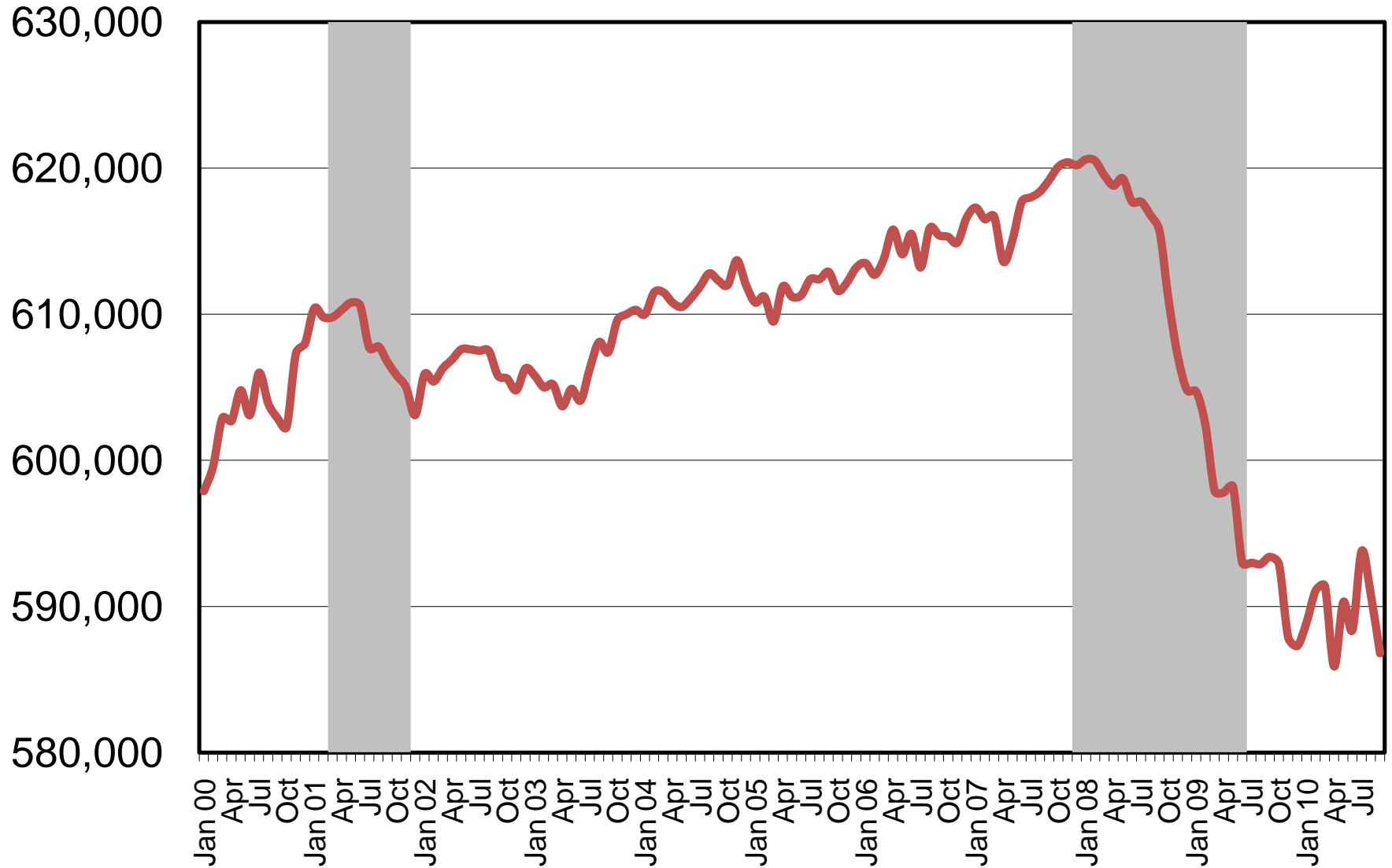
2009 Annual Average Unemployment Rates By Age Group, Maine



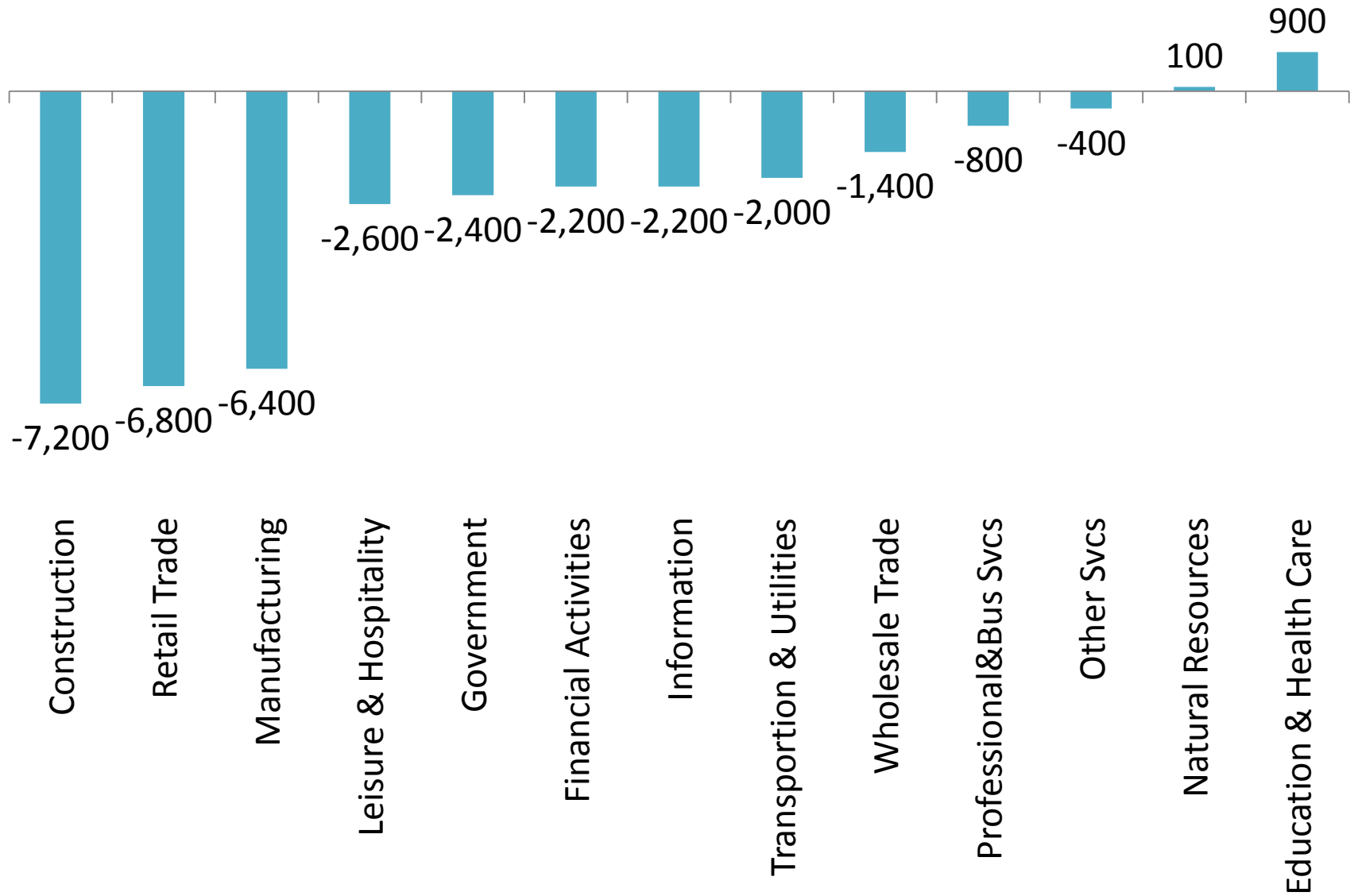
2009 Average Unemployment Rates by Educational Attainment among those age 25 and over, Maine



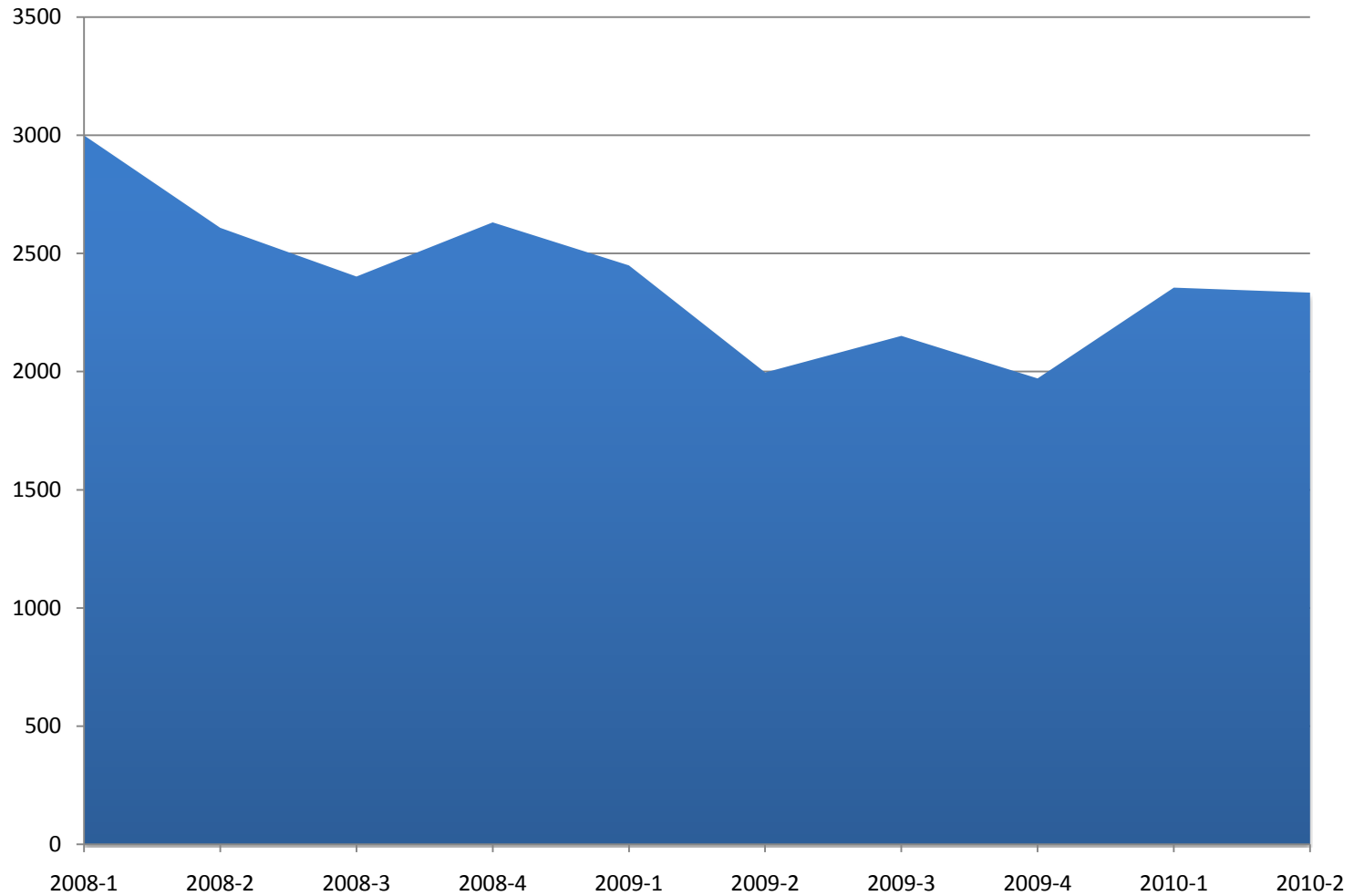
Payroll Jobs in Maine 2000-2011



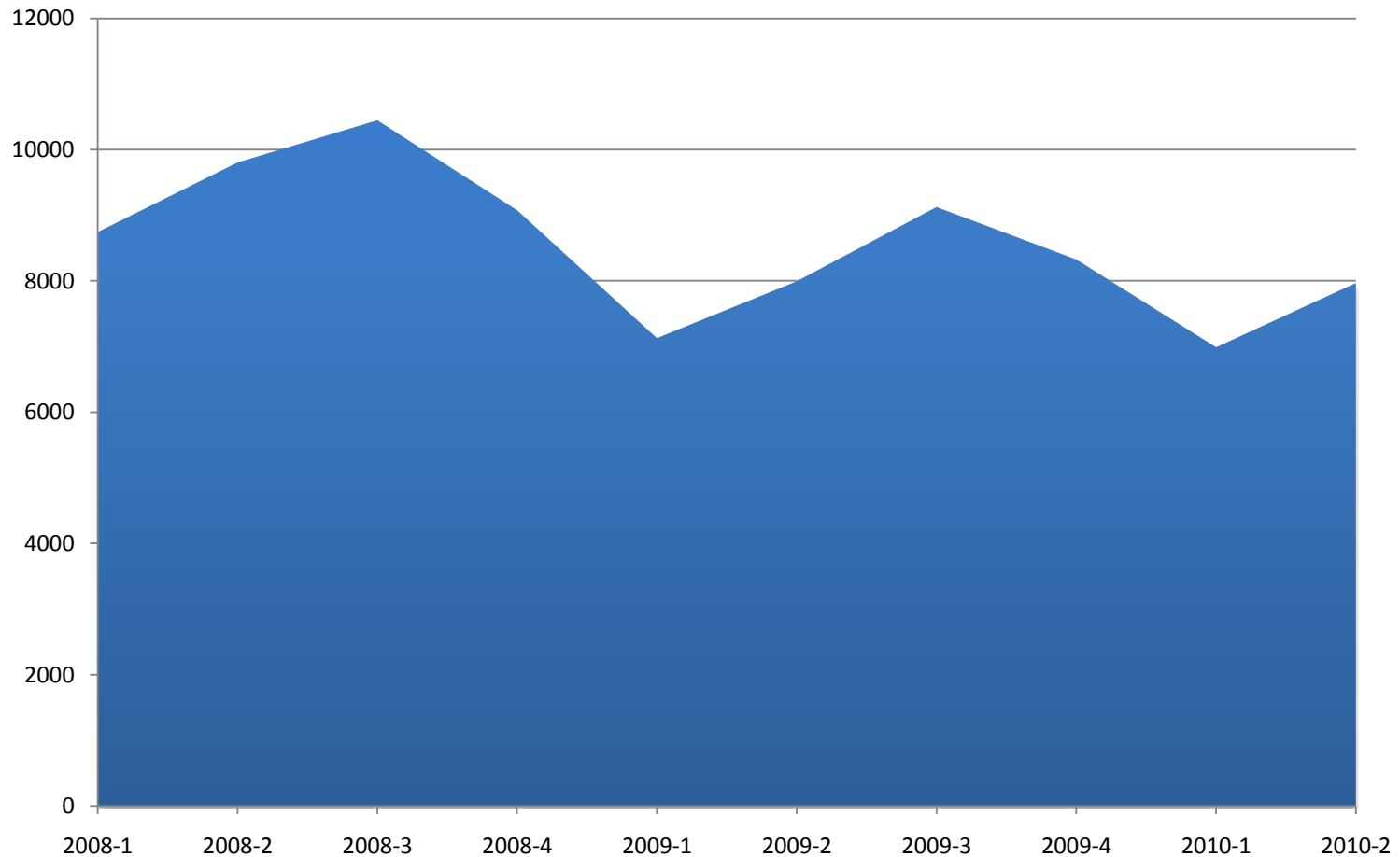
Job Losses In Maine By Industry Sector 2008-2010



New Hires, Professional, Scientific and Technical Services 2008-2010 (1st and 2nd Quarter), Maine



Health Care and Social Assistance Sector, New Hires in Maine 2008-2010 (1st and 2nd QTR)



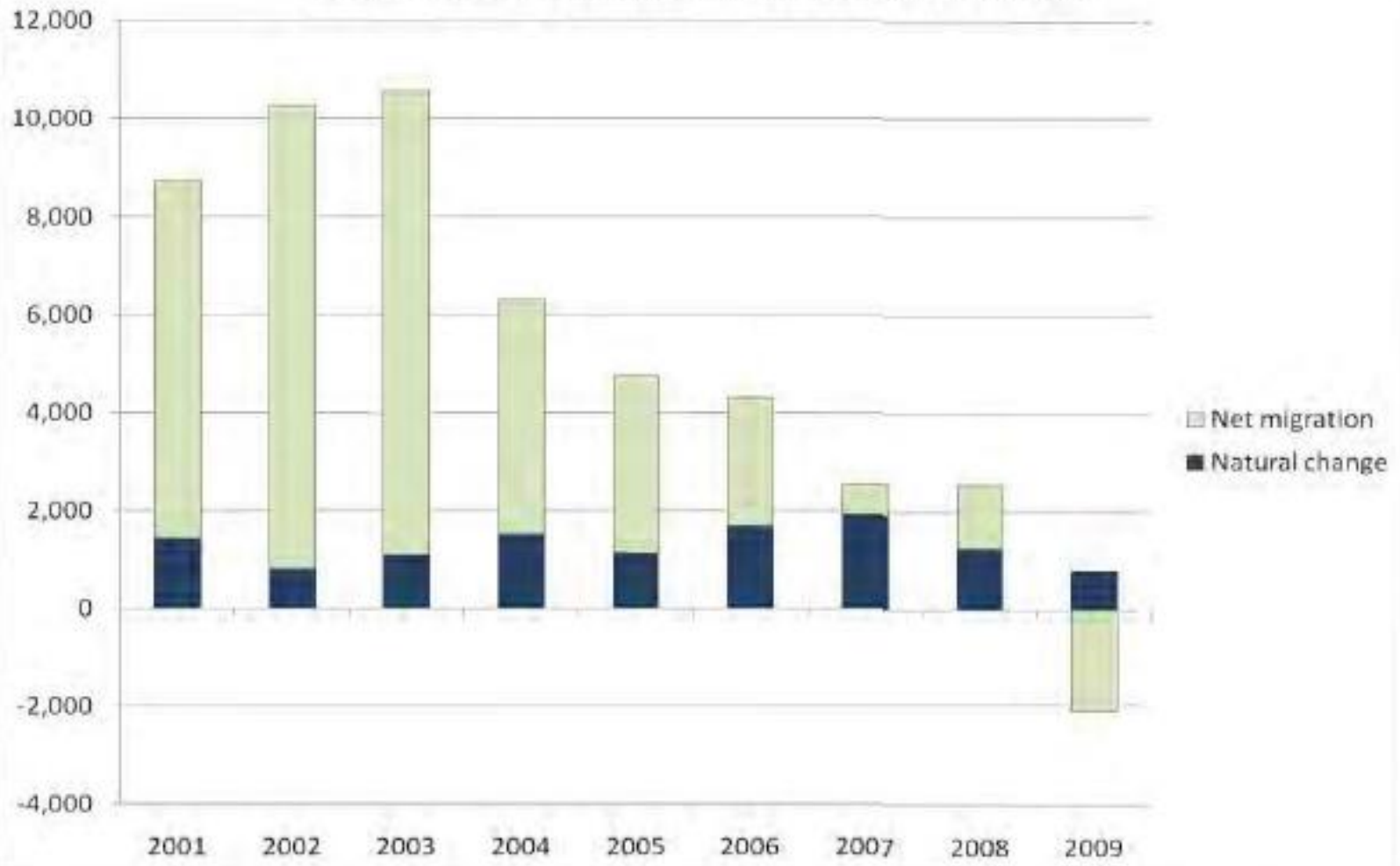
The Outlook for the Maine Economy

2010-2015

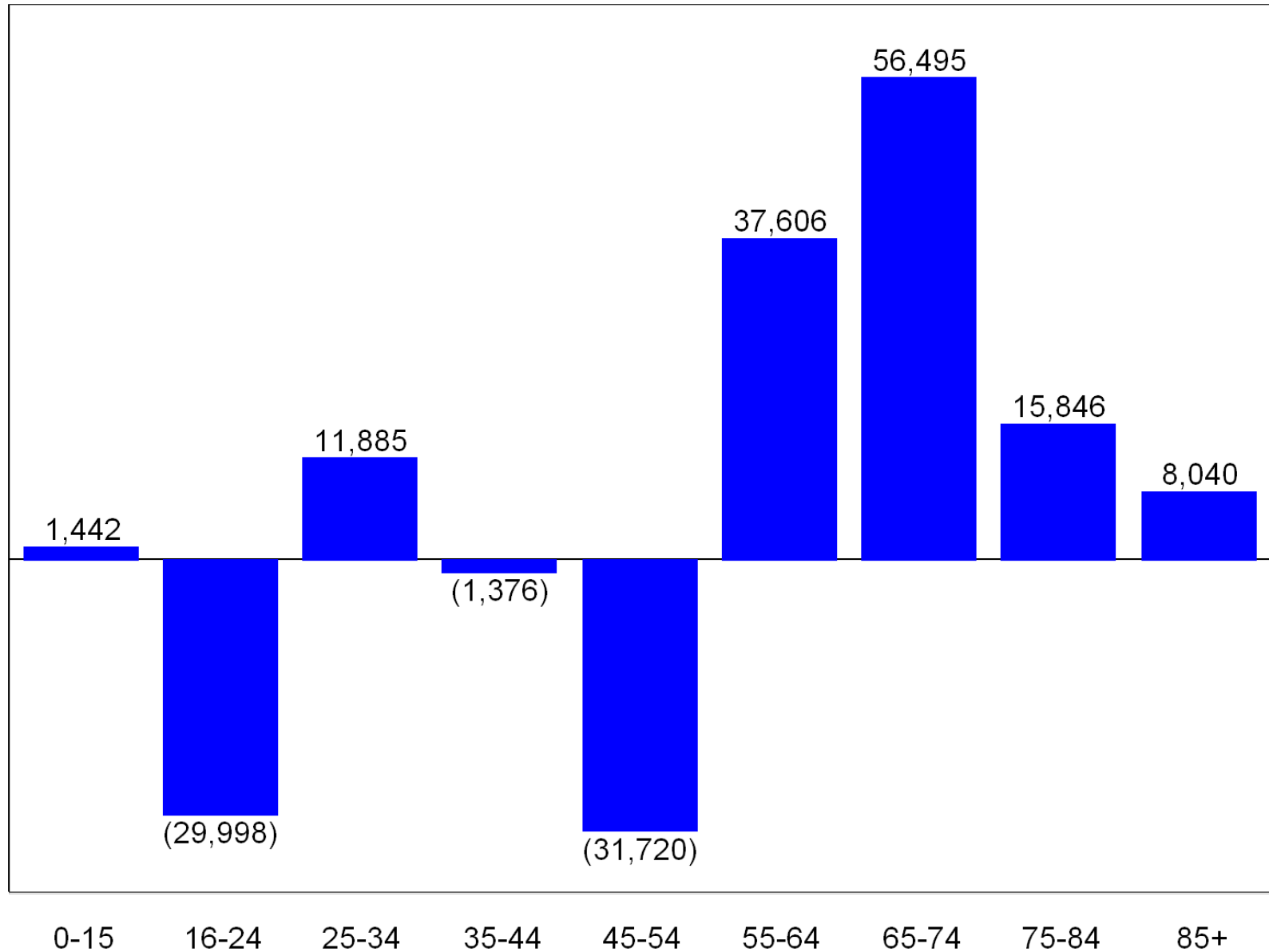
Calendar Years	2010	2011	2012	2013	2014	2015
Wage & Salary Employment (Annual Percentage Change)						
CEFC Forecast 02/2010	-1.3%	1.2%	2.2%	2.0%		
CEFC Forecast 11/2010	-1.0%	0.4%	1.5%	2.1%	1.7%	1.0%
Economy.com 12/2010	-0.8%	0.6%	1.5%	2.6%	2.4%	1.1%
Economy.com 01/2011	-0.8%	1.5%	1.9%	1.8%	2.1%	1.1%
Wage & Salary Income (Annual Percentage Change)						
CEFC Forecast 02/2010	-0.4%	2.5%	3.9%	4.9%		
CEFC Forecast 11/2010	1.8%	3.4%	5.7%	6.2%	5.5%	4.2%
Economy.com 12/2010	2.6%	4.4%	6.8%	8.4%	7.5%	5.6%
Economy.com 01/2011	2.0%	4.5%	7.5%	7.9%	7.3%	5.6%
Personal Income (Annual Percentage Change)						
CEFC Forecast 02/2010	1.5%	3.0%	4.0%	4.6%		
CEFC Forecast 11/2010	2.9%	3.0%	4.7%	4.9%	5.0%	4.5%
Economy.com 12/2010	3.3%	3.8%	6.6%	6.7%	5.1%	4.5%
Economy.com 01/2011	3.0%	4.8%	5.3%	7.0%	5.4%	4.6%
CPI (Annual Percentage Change)						
CEFC Forecast 02/2010	1.7%	2.0%	2.1%	2.0%		
CEFC Forecast 11/2010	1.7%	1.5%	2.3%	2.6%	2.3%	2.2%
Economy.com 12/2010	1.6%	1.5%	2.6%	3.0%	2.5%	2.4%
Economy.com 01/2011	1.6%	1.5%	2.5%	3.2%	2.7%	2.4%

Maine's Future Workforce: Demographic Challenges

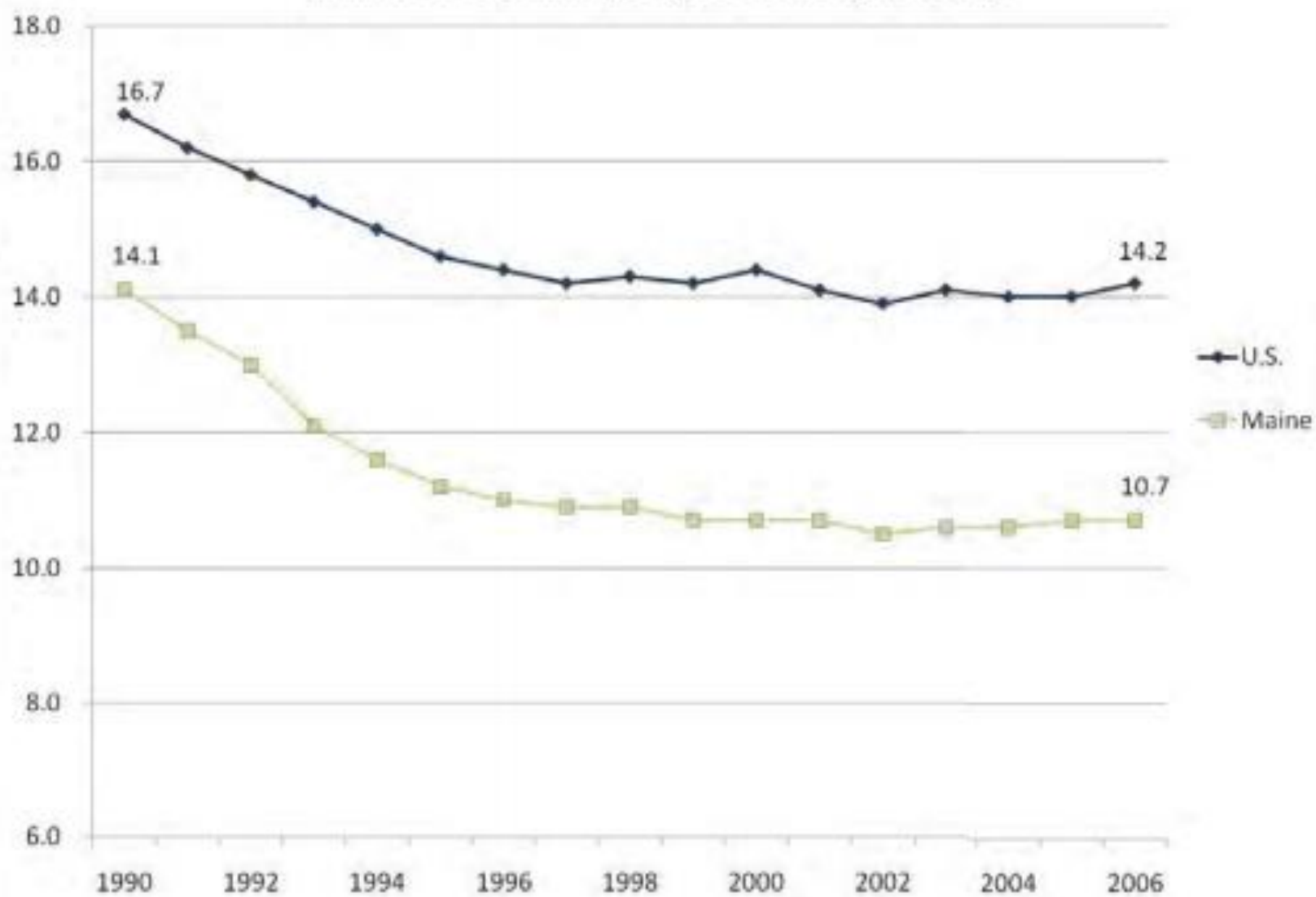
Components of population change from previous year



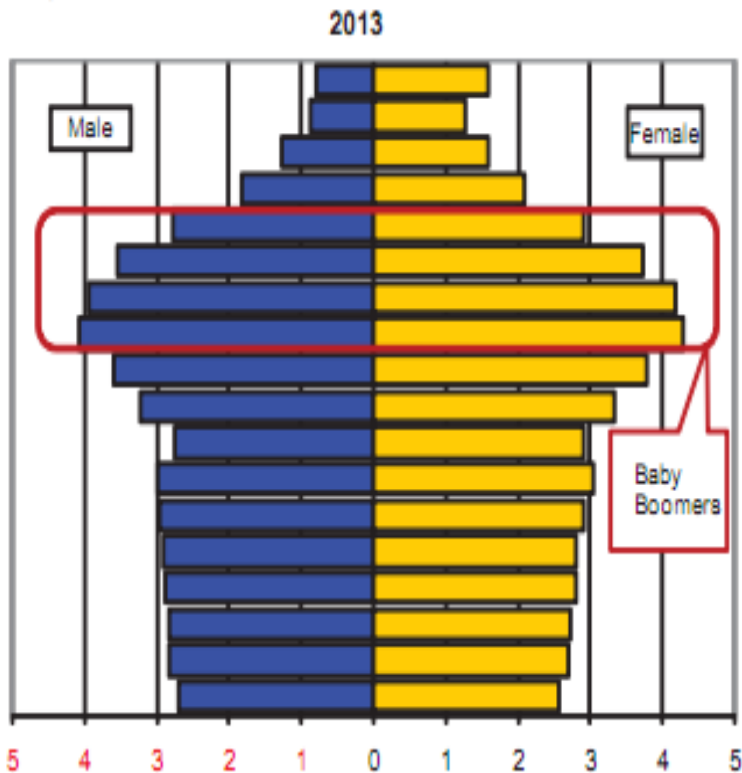
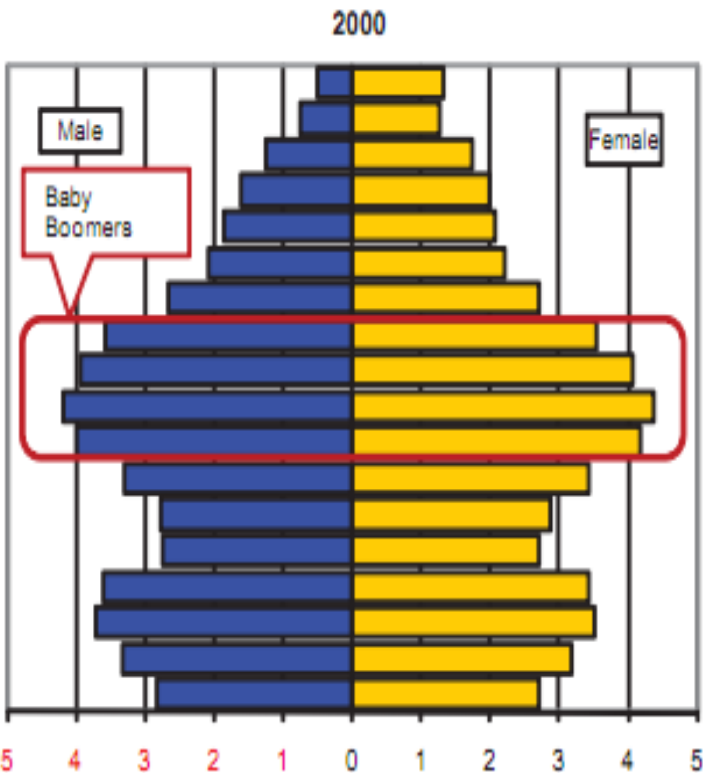
Population Net Change by Age Group, 2008 to 2018

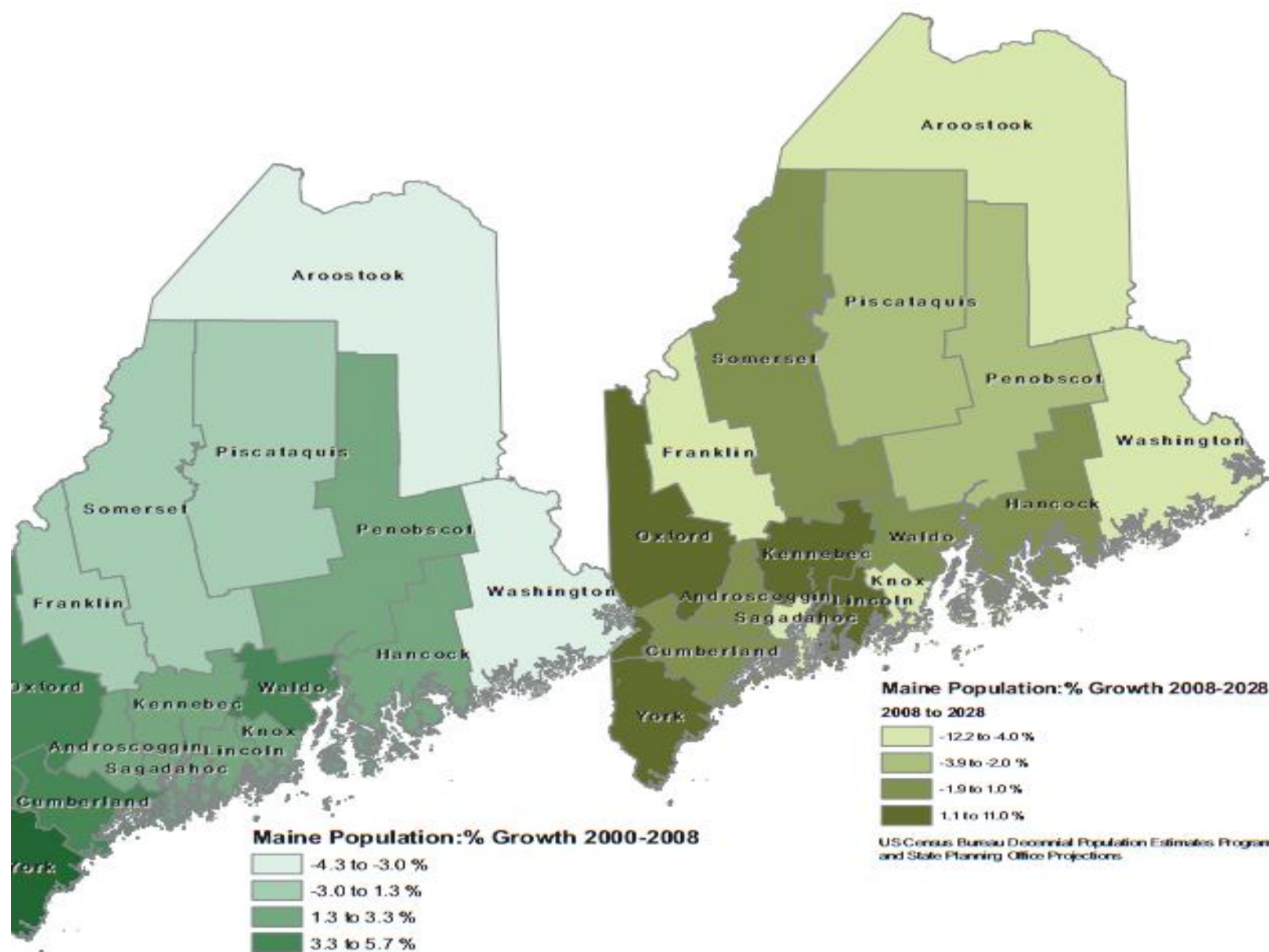


Number of live births per 1,000 women (birth rate)



Population Pyramids of Maine
Percent of Total Population





Maine Population:% Growth 2000-2008

- 4.3 to -3.0 %
- 3.0 to 1.3 %
- 1.3 to 3.3 %
- 3.3 to 5.7 %
- 5.7 to 8.0 %

US Census Bureau Decennial Population and Estimates Program

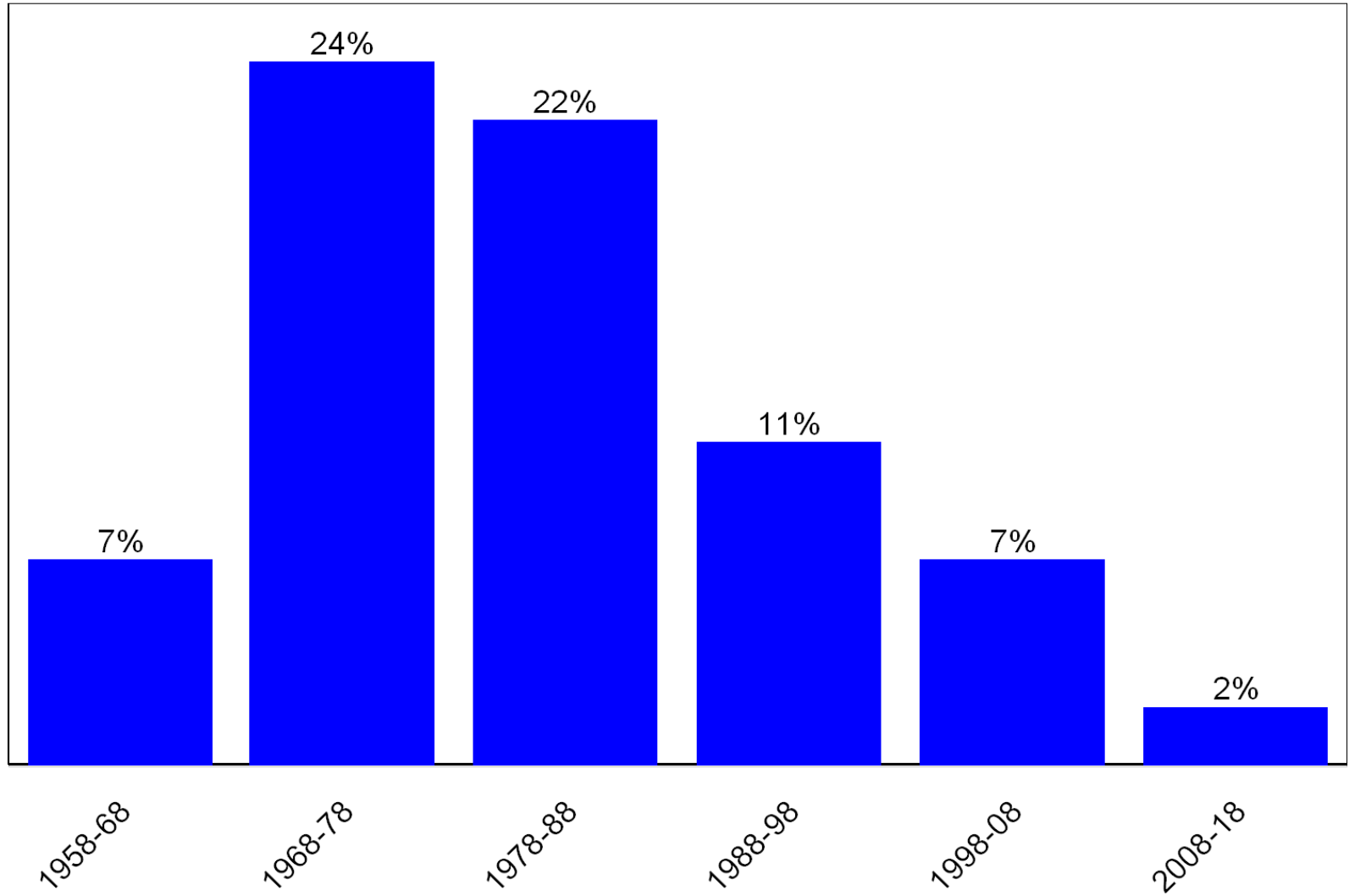
Maine Population:% Growth 2008-2028

2008 to 2028

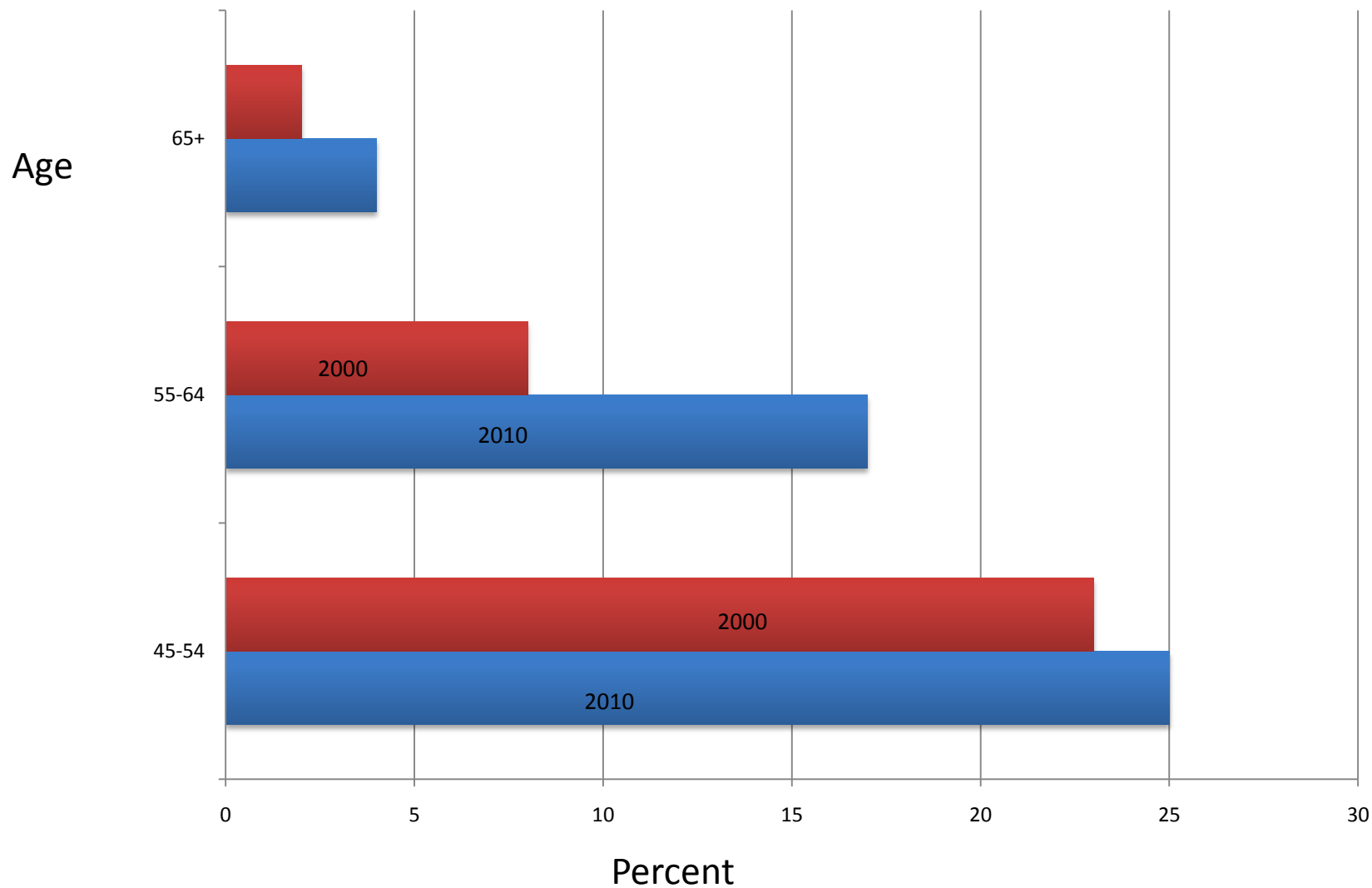
- 12.2 to -4.0 %
- 3.9 to -2.0 %
- 1.9 to 1.0 %
- 1.1 to 11.0 %

US Census Bureau Decennial Population Estimates Program and State Planning Office Projections

Growth Rates for Maine Labor Force



Maine's Aging Workforce in the Professional, Scientific and Technical Sector 2000 and 2010



Opportunities, Occupation and Skills Projections 2008-2018

**“A major obstacle is finding
workers in Maine with the right
skills.”**

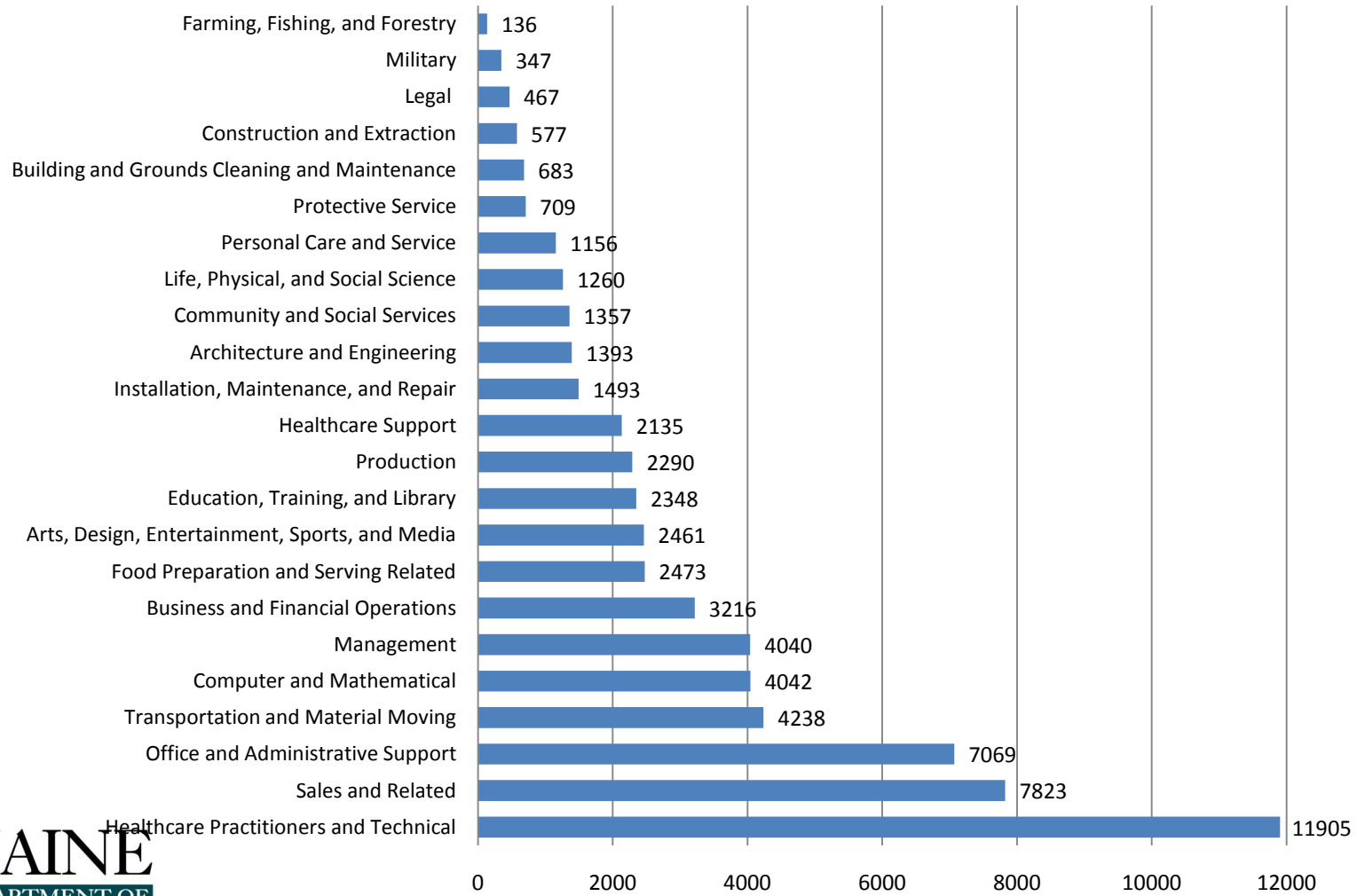
Michael Dubyak, CEO of South Portland
based Wright Express commenting on
his plans to hire 30 to 50 new workers
in 2011

Chart2: Employment vs. Labor Demand – Seasonally Adjusted Data
area=ME



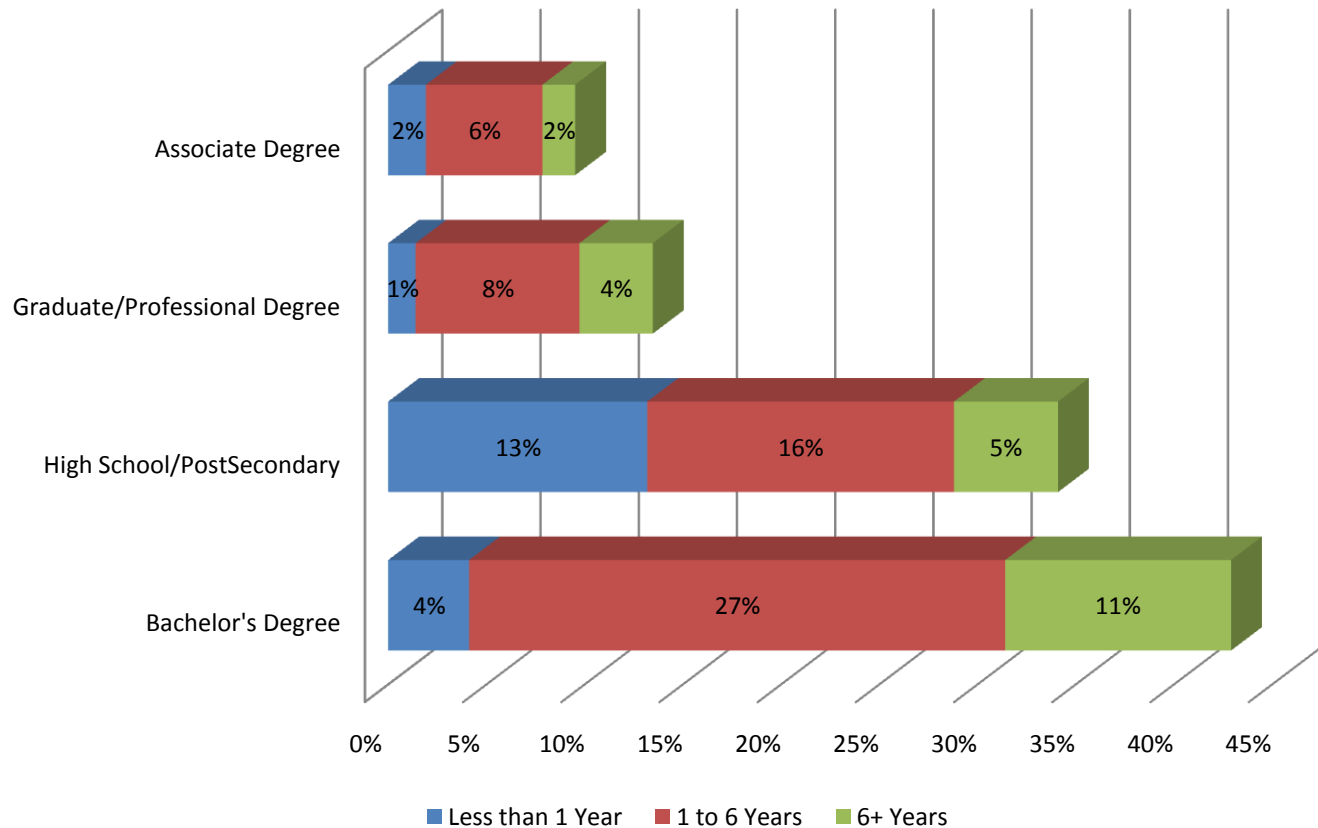
Source: The Conference Board, BLS

Job Openings by Occupation Group Maine, July to December 2010

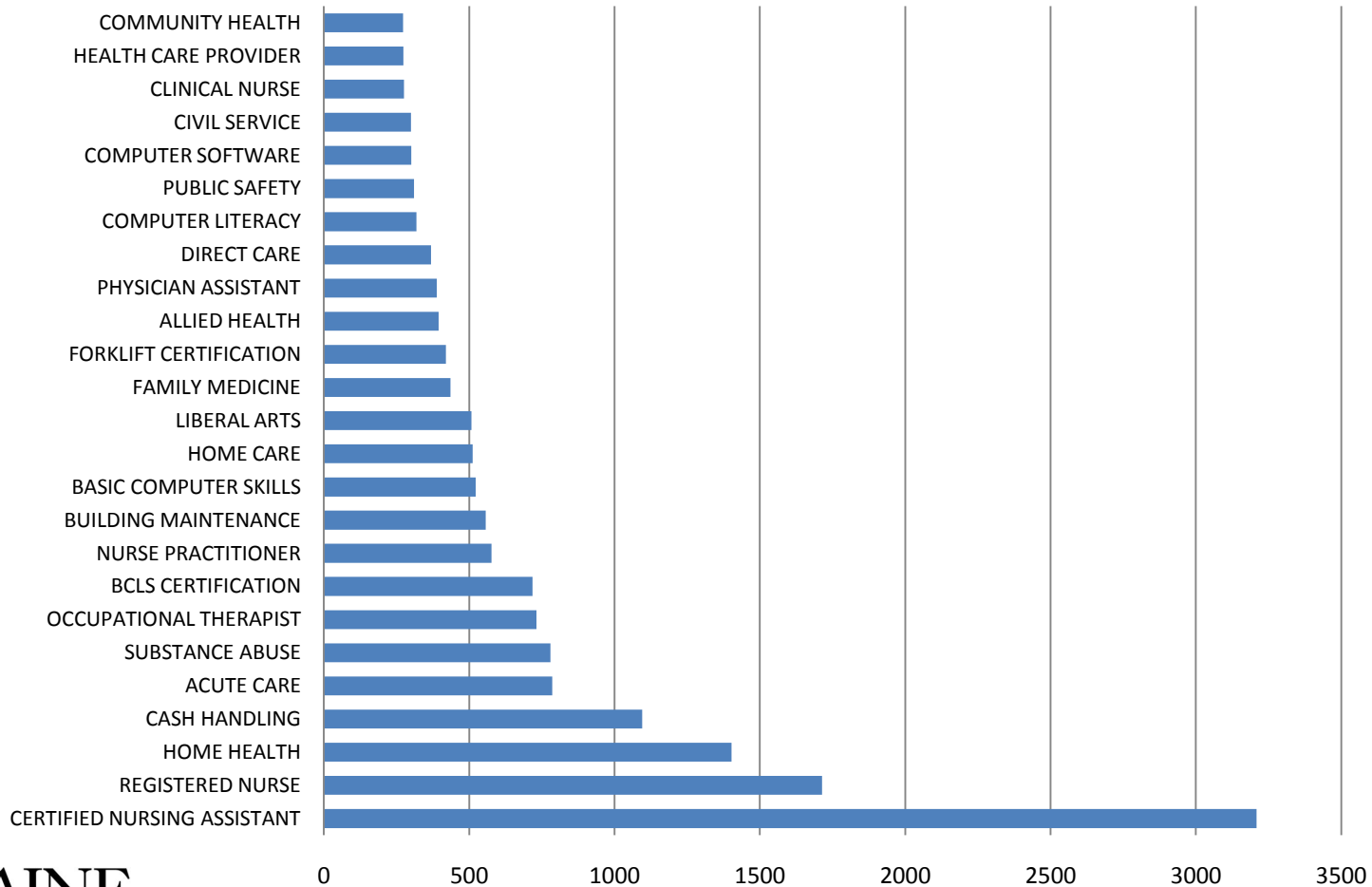


Source: Using Burning Glass Real-time Postings Data July-Dec.2010.

Job Openings by Education and Experience Maine, July to December 2010

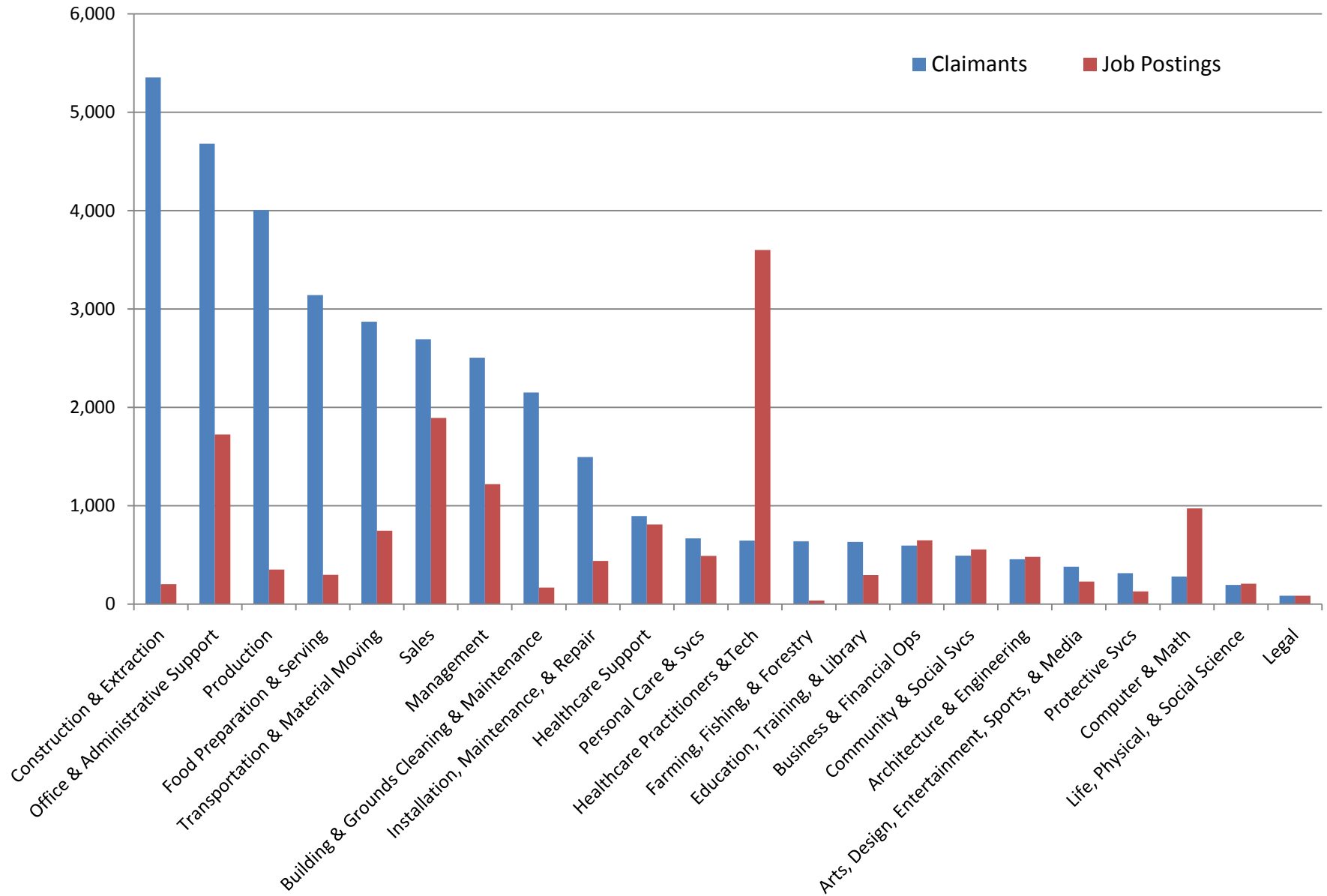


Certificates in Demand Maine, July to December 2010



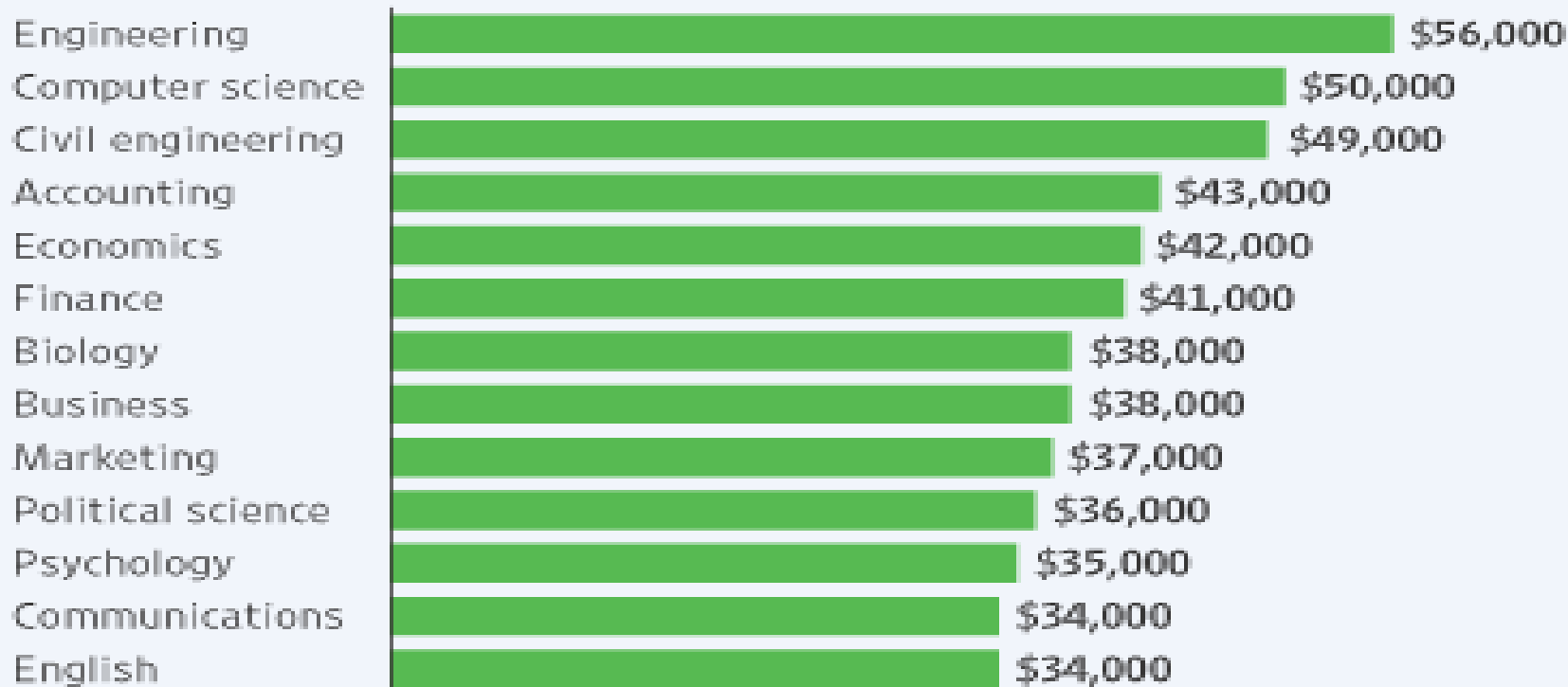
Source: Using Burning Glass Real-time Postings Data July-Dec. 2010.

Comparison of Claimants and Job Postings by Major Occupational Group



Major Payday











Average pay for respondents' first full-time job out of college, by major



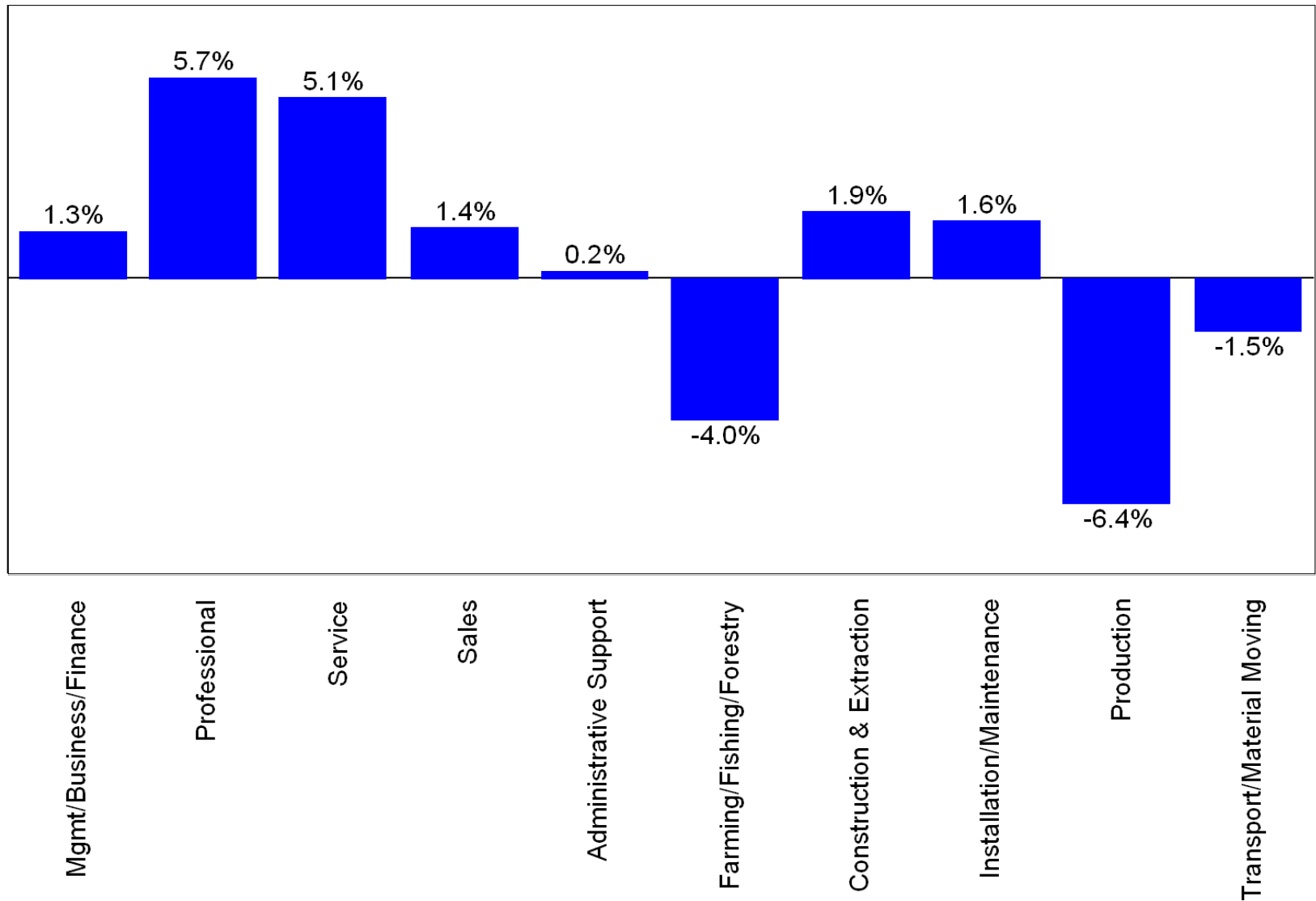
Note: Survey of about 11,000 respondents conducted between April and June of people who graduated between 1999 and 2010. Pay includes salary, bonuses, commission and profit-sharing, and is adjusted to be in 2010 dollars. Margin of error ranges between 0.5% and 5%. Respondents were in a set of jobs deemed satisfying, well-paid and with growth potential.

Source: PayScale.com/WSJ survey

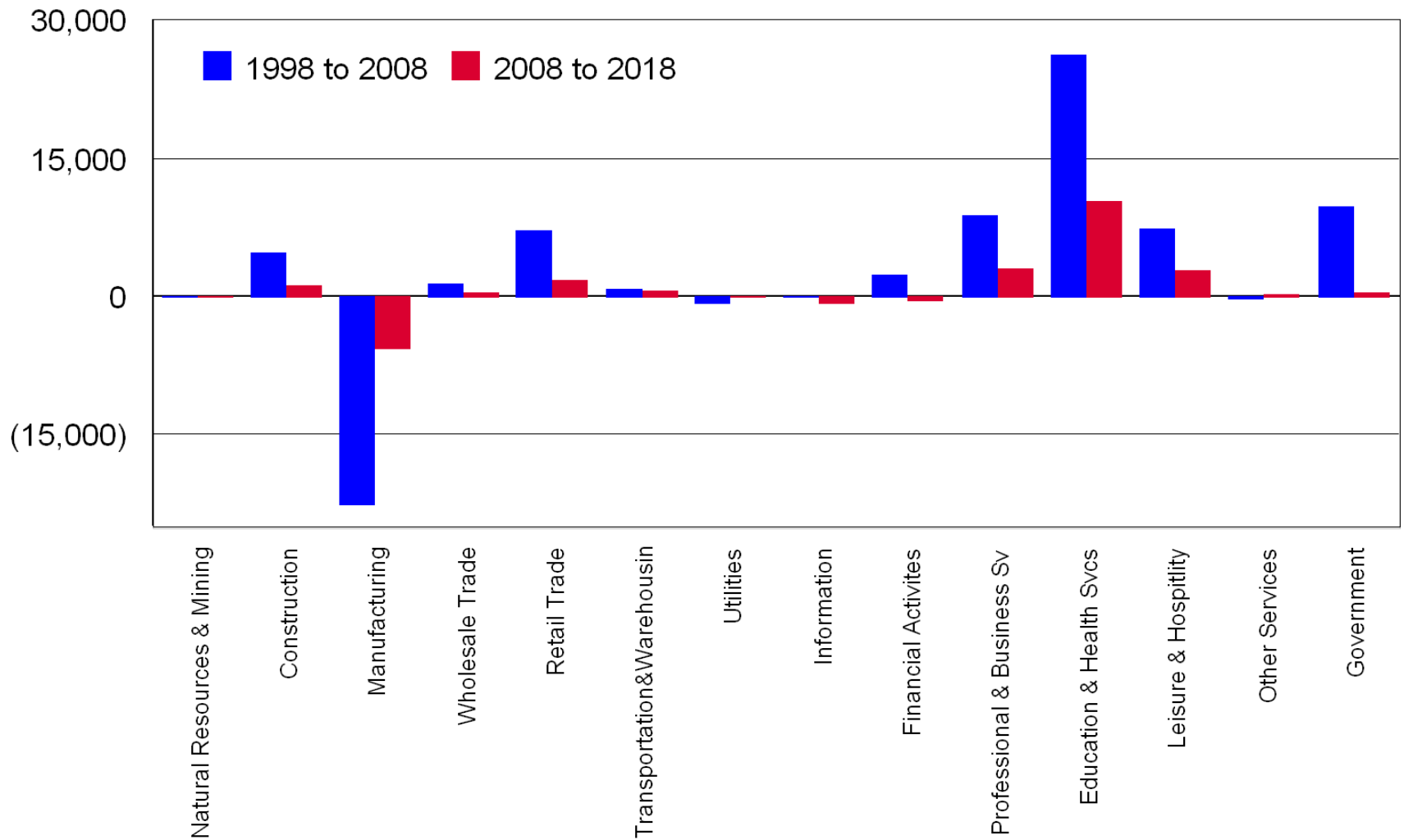
Fastest Growing Occupations Requiring Bachelors Degree or Higher 2008-2018, US

#	Occupation	Employment		Percent [*] Change	<u>Earnings</u>	<u>Training Needed</u>
		2008	2018			
1	Biomedical engineers	16,100	27,600	72%		Bachelor's degree
2	Network systems and data communications analysts	292,000	447,800	53%		Bachelor's degree
3	Financial examiners	27,000	38,100	41%		Bachelor's degree
4	Medical scientists, except epidemiologists	109,400	153,600	40%		Doctoral degree
5	Physician assistants	74,800	103,900	39%		Master's degree
6	Biochemists and biophysicists	23,200	31,900	37%		Doctoral degree
7	Athletic trainers	16,400	22,400	37%		Bachelor's degree
8	Computer software engineers, applications	514,800	689,900	34%		Bachelor's degree
9	Veterinarians	59,700	79,400	33%		First professional degree
10	Environmental engineers	54,300	70,900	31%		Bachelor's degree

Job Growth by Occupational Group, 2008 to 2018

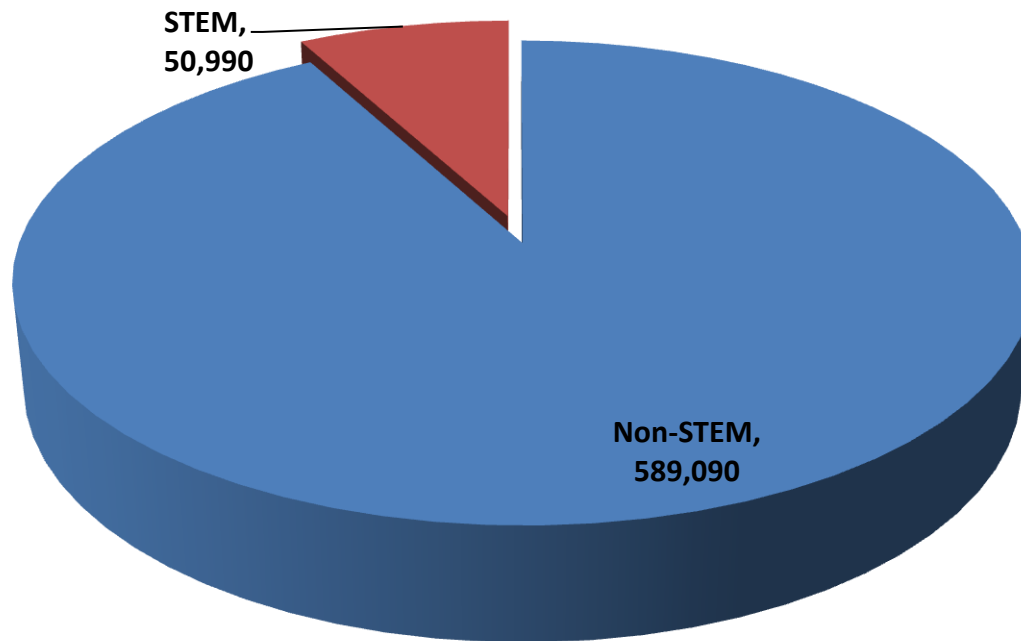


Job Outlook by Industry Sectors



The number of people working
in **STEM** occupations
represents 8% of those
employed and is growing.

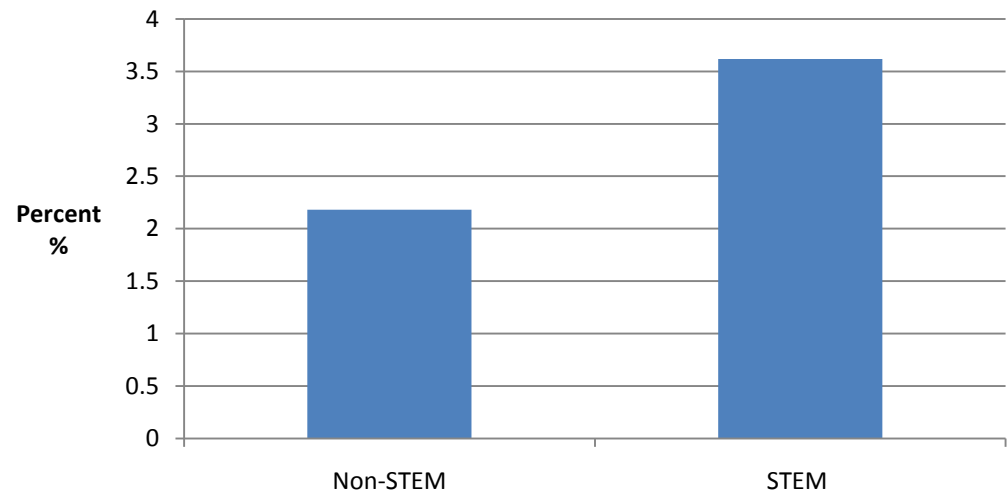
2009 Estimated Total Employment



In Maine STEM occupations are growing at a faster rate than all other occupations.

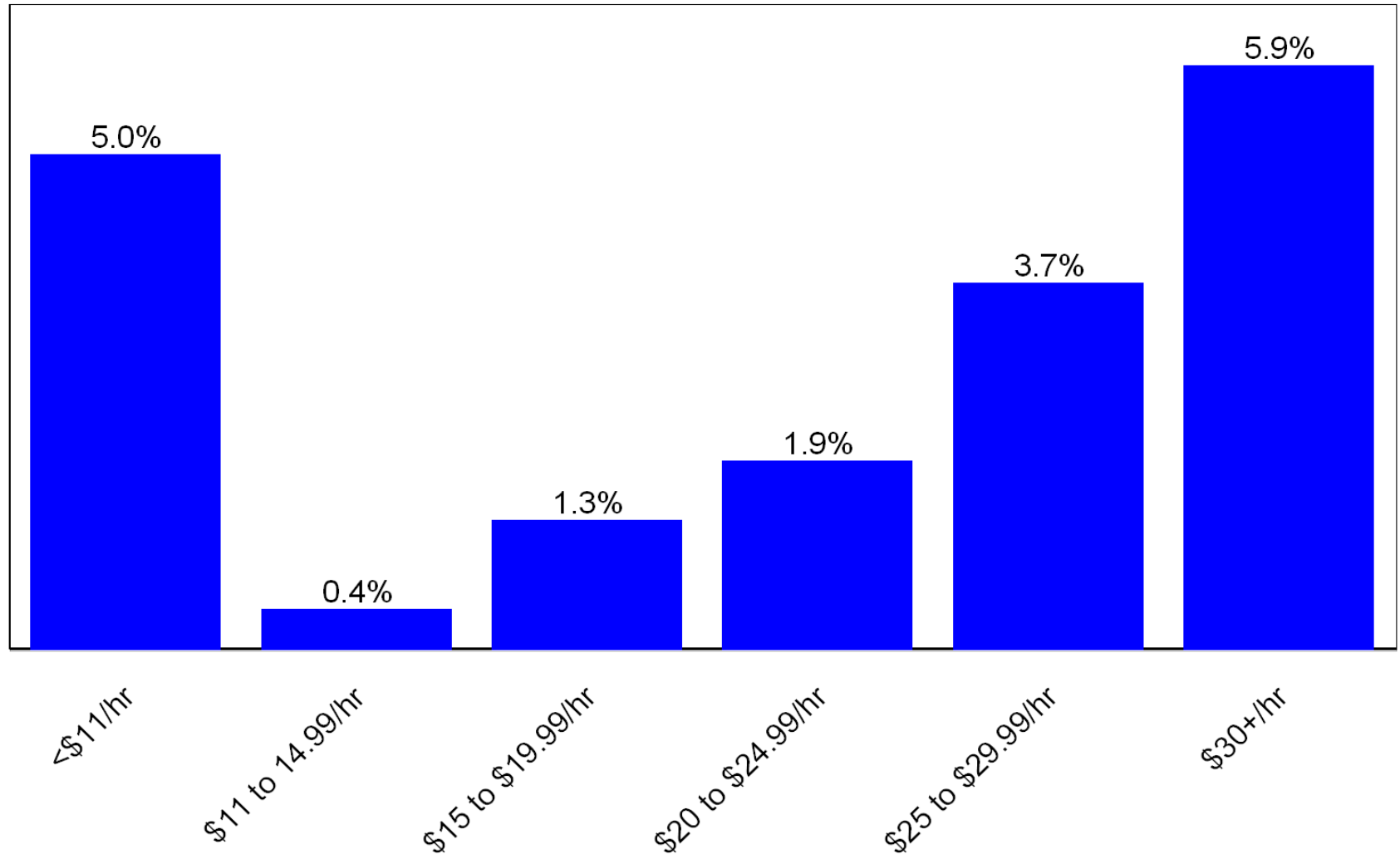


Maine Employment Growth Rate
2008-2018

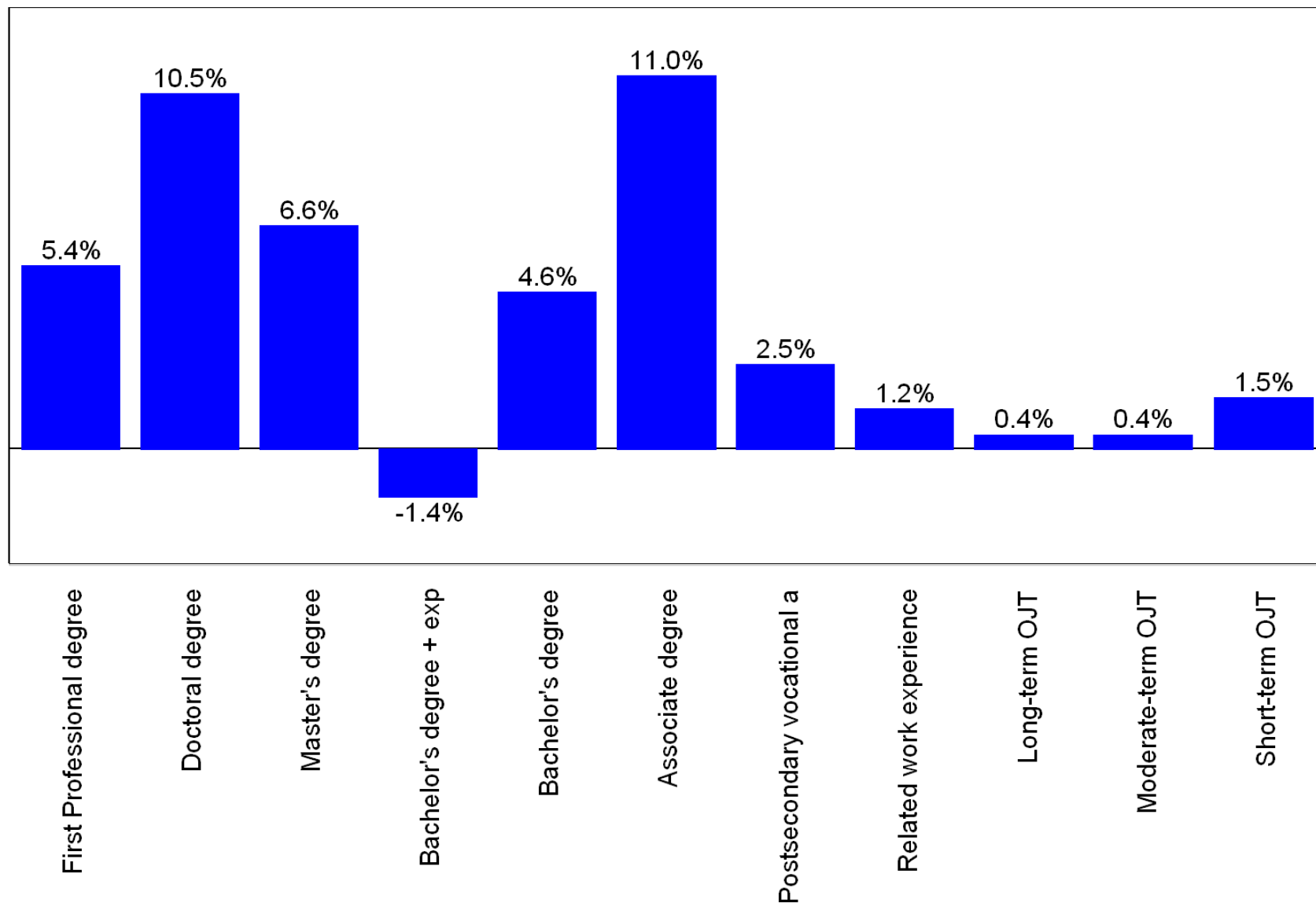


Science, Technology, Engineering, and Mathematics

2008-2018 Job Growth By Wage Group



Job Growth by Education or Training Requirements, 2008 to 2018



Alternative Occupational Projections

Maine Jobs By Educational Level 2018

Georgetown University, Center for Education and the Workforce

- Associates Degree = 136,000
 - Bachelors Degree = 128,000
 - Graduate Degree = 58,000
-
- By 2018, 59% of jobs in Maine will require post secondary education

So What-Now What

A MODEL FOR DEVELOPING A LOCAL IMPROVEMENT PROCESS

